ERIC Document Resume	See Instruction Sheet	DATE OF RESUME 9/2/65	DATE RECEIVED

A. PUBLICATION DATA

1. ERIC ACCESSION NO.	2. ORIGINATOR CONTROL NO(S).	3. IDENTIFICATION NO.	DO NOT WRITE IN SPACE BELOW
ED000998	R2 p.12		

4. AUTHOR(S):
Haggard, J.D.

5. TITLE OF DOCUMENT ABSTRACTED:
College Mathematics for the General Student

6. PUBLICATION TITLE:
The University of Missouri Bulletin

7. EDITOR(S):
N.A.

8. PLACE OF ORIGIN
University of Missouri
ORG.
ST.
CITY, STATE
Columbia, Missouri
TELE. EXT.
INST/LOC CODE

9. PUBLISHER OR SOURCE
University of Missouri

10. VOL.	11. PAGES	12. MO./YR.	13. TOTAL PP.
LV	52-54	Sep. 54	3

MICROFILM COPY AVAILABLE
YES ☒ NO ☐

COPYRIGHT GRANTED
YES ☐ NO ☒

COPYRIGHT RELEASE FILED
YES ☐ NO ☐

TYPE OF REPORT
PROPOSAL ☐
IN-PROGRESS ☐
FINAL ☒
FOLLOW-UP ☐

OTHER ERIC REFERENCES:

ERIC SATELLITE CODE

B. INDEXING DATA

14. SUBJECT AREA

15. TYPE OF ENDEAVOR
doctoral dissertation

16. INDEXING TERMS (6-12)

mathematics	abstracts			
curriculum	experimental studies			
textbooks				

17. ABSTRACT (MAX. 280 WORDS)

Study to determine mathematics needed by general college student, both in an out of school, ''and to make some comparisons between this mathematics and the usual college offerings to such students, as represented by adopted college textbooks in general mathematics.''

ERIC No.

18. SOURCE OF ABSTRACT

C. FUNDING DATA

19. SUPPORTING ORGANIZATION	20. DIVISION OR DEPT.	21. CONTRACT NO. / PROJECT NO.
	22. TOTAL COST OF PROJECT	
	23. DURATION OF PROJECT	U.S. Department of Health, Education, and Welfare Office of Education

ERIC Form 1

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.

STUDY 27

378.7M71
H122

HAGGARD, J. D.: *College Mathematics for the General Student* (Ed.D. 1951)

MAJOR ADVISER: Ralph K. Watkins.

PURPOSE: To determine what mathematics is needed by the general college student, both in his school work and in certain out-of-school activities, and to make some comparisons between this mathematics and the usual college offerings to such students, as represented by adopted college textbooks in general mathematics.

METHOD OF RESEARCH: A synthesis of twenty-three research studies, reporting the mathematics used in an area pertinent to the general college student, was made. This synthesis was then compared with the content of nineteen college level cultural general mathematics textbooks.

SUMMARY:

(1) A list of seventy-nine mathematical topics, and the number of studies reporting each, was determined in the synthesis.

(2) Most of the mathematics reported as important by the twenty-three research studies is quite elementary in comparison to "traditional" college mathematics courses.

(3) General college students who have successfully completed four years of high school mathematics could omit mathematics from their present curricula without serious handicap if the needs of these students are accurately depicted by the synthesis.

(4) Arithmetic is more useful to the general college student than any other of the branches of mathematics. Analytic geometry and calculus appear to be of little value to him.

(5) The mathematics reported to be important by the synthesis of investigations compares well with that which Brown found to be important by obtaining opinions of over nine hundred college teachers of mathematics.

(6) Only about one half of the important mathematics topics, as determined by the number of research studies listing the topic as important, appear as the important topics of the textbooks, as determined by the space devoted to their discussion.

(7) Each topic listed as important by the research studies was discussed in one or more of the nineteen textbooks examined, but no one book treated all of the topics.

(8) The more recently published textbooks are more nearly in agreement with the mathematics suggested by the synthesis, than are the older books.

(9) There is little uniformity of subject matter content exhibited by the nineteen textbooks. On the average only two fifths of each two books discussed common topics.

(10) General mathematics textbooks, both in subject matter and method of presentation, are tremendously influenced by the pattern set by the "traditional" mathematics courses.

ED000998

RECOMMENDATIONS:

(1) A test, based on the mathematics revealed by the synthesis, should be administered to all general college freshmen whose mathematical background is in question.